

**Scientific Discovery Through Advanced Computing**  
**PI Meeting – “Computing for Science”**  
**January 15-16, 2002**  
**Hyatt Regency Reston, VA**  
**Regency Ballroom**

**Agenda**

**Goal: Familiarize the group with the overall integrated SciDAC program and initiate working together. Specifically, develop:**

- An understanding of DOE’s objectives and metrics for success of the SciDAC program
- A shared understanding of each project’s main objectives and research topics
- A shared understanding of dependencies between projects (e.g., coupling of CS/Math with Science needs; initial identification of working groups; ...)
- An understanding of the management approach for the SciDAC program

**Day 1**

- 8:00 – 8:15 Welcome/Opening Remarks (Acting Director of Science – Dr. James F. Decker)
- Office of Science Priorities, Project Management Approach to Research, and Importance of SciDAC
- 8:15- 8:45 Welcome/Opening Remarks/ Introduction – Acting SciDAC Director (Dave Bader)
- Program and Management Strategies
  - Funded Program Components
  - Introduce SciDAC Coordinating Committee
  - Intellectual Property/Open Source Software
  - Infrastructure Discussion and Issues (includes present computational/network resources, requirements (from survey) and future prospects)
- 8:45 – 10:30 Application Science Overview (BES, HENP)
- For each application discussed:
- Goals
  - Breakthrough results
  - Interactions
  - Resource needs
  - Needs from ISIC’s, Collaboratories
- Chemical Sciences Overview
- BES Introduction- Bill Kirchoff
  - BES Combustion - Larry Rahn
  - BES Quantum Chemistry - Jeff Nichols
- High Energy and Nuclear Physics Overview
- HENP Intro - Vicky White
  - HENP -Terascale Supernova Initiative - Tony Mezzacappa
  - HENP Accelerator Science and Technology - Kwok Ko
- 10:30 – 10:45 Break (*Regency Ballroom Foyer*)
- 10:45 - 12:15 Application Sciences Overview (FES, BER)
- For each scientific application discussed:
- Goals
  - Breakthrough results
  - Interactions
  - Resource needs
  - Needs from ISIC’s, Collaboratories
- Fusion Energy Sciences Overview
- Introduction – Steve Eckstrand
  - Overview of FES Projects – Bill Tang
- 12:15 – 1:15 Lunch (*Regency Ballroom Foyer*)
- 1:15 – 3:15 ISICs panels
- For each ISIC

- Goals
- Benefits to applications
- Interactions
- Requirements needed from applications
- 3:15 – 3:30 Break (*Regency Ballroom Foyer*)
- 3:30 – 5:30 Collaboratories/Networking Panel
  - For Middleware Networking Research – Ray Bair
    - Goals and benefits
    - Existing and planned capabilities of near-term interest
    - Organization for promoting interactions
  - For Networking Research – Wu Feng
    - Goals and benefits
    - Existing and planned capabilities of near-term interest
    - Organization for promoting interactions
  - For the DOE Science Grid – Bill Johnston
    - Goals
    - Benefits to applications
    - Interactions planned and opportunities for
    - Requirements process
  - For a representative pilot – Richard Mount
    - Goals
    - Benefits
    - Interactions
- 6:00 – 8:00 Dinner – Walt Polansky, speaker

## Day 2

- 8:15 – 10:15 Poster Session – ISICS/Collaboratory/Networking
- 10:15 – 12:30 Poster Session – Scientific Applications
- 12:30 – 2:00 Working Lunch (*Regency Ballroom Foyer*)
- 2:00 – 3:30 Close-out
  - Field Representatives - Summary
    - Summary of Critical Points
    - Connections
      - Name of the principal investigator making the new connection
      - Projects having the connection
      - Nature of the connection (research to be explored)
      - Whether the connection exists with the current research portfolio or if modifications (e.g., additional tasks to projects or new projects) are needed
      - Planned follow up activities
    - General observations to promote success of the program integration (e.g., Managing Interdependencies/Initial Working Groups)
  - SciDAC Director
    - Next Steps and close

3:30-5:30 Parallel Breakout Sessions

ISICs Projects Open Discussion – moderated by Fred Johnson, Chuck Romine (*North Point/Tall Oaks*)  
 Network Projects Open Discussion – moderated by Thomas Ndousse (*Hunters Woods*)